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**SOCIODEMOGRAPHIC DATA USED FOR IDENTIFYING
POTENTIALLY HIGHLY EXPOSED POPULATIONS**

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FOREWORD

The National Center for Environmental Assessment (NCEA) of the U.S. Environmental Protection Agency's Office of Research and Development (ORD) has five main functions: (1) providing risk assessment research, methods, and guidelines; (2) performing health and ecological assessments; (3) developing, maintaining, and transferring risk assessment information and training; (4) helping ORD set research priorities; and (5) developing and maintaining resource support systems for NCEA. The activities under each of these functions are supported by and respond to the needs of the various program offices. In relation to the first function, NCEA sponsors projects aimed at developing or refining techniques used in exposure assessments.

This document is being published as a companion to the *Exposure Factors Handbook*. Due to unique activity patterns, preferences, practices, and biological differences, various segments of the population may experience exposures different from those of the general population, and these exposures, in many cases, may be greater. It is necessary for risk or exposure assessors characterizing a diverse population to identify and enumerate certain groups within the general population who are at risk for greater contaminant exposures or exhibit a heightened sensitivity to particular chemicals. This document provides information, where possible, for addressing these populations.

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PREFACE

The National Center for Environmental Assessment (NCEA) has prepared this document to assist scientists and concerned communities in identifying subsets of the general population who might experience more frequent contact with and greater exposures to environmental contaminants. Furthermore, this document provides demographic data to help users determine the number of people in these potentially highly exposed subsets of the general population.

The *1994 Executive Order on Federal Actions to Address Environmental Justice in Minority Population and Low-Income Populations* emphasized the importance of protecting minority and low-income communities from disproportionate environmental hazards and effects. In addition to low-income and minority populations, other populations categorized by age, gender, and location, to name a few, are candidates for potentially increased exposures depending on the given scenario. This document was initiated because previous efforts focused predominantly on factors, data, and scenarios based on national averages for the general population. To provide protection to highly exposed populations, risk and exposure assessments must consider relevant and more accurate data that pertain to these populations.

The current document results from revisions and narrowing of content scope from several NCEA draft documents, including *Exposure Factors for Specific Demographic and Ethnic Subgroups* (March 1995), which presented exposure data that were found to correlate significantly with ethnicity. Significant portions of that document were incorporated into the revised *Exposure Factors Handbook* that was published in the Fall of 1997. Remaining materials became the basis for the draft document *Identifying Susceptible Populations* (March 1996), which provided information to help assessors identify and enumerate populations potentially at risk for increased exposures and at risk due to heightened biological sensitivities to environmental contaminants. The above draft documents were reviewed by staff members from the U.S. Environmental Protection Agency who offered comments that have led to the current document, *Sociodemographic Data Used for Identifying Potentially Highly Exposed Populations*. The major difference between this draft and previous drafts is that biologically sensitive data are not

addressed and the scope has been expanded to include additional categories of highly exposed populations in addition to ethnicity.

The data and population subsets presented are not intended to be comprehensive or prescriptive. This document does not include all possible populations and does not include guidance for identifying and enumerating all populations under every circumstance. The inclusion of a specific population in this document is not intended to imply that the specific population addressed is more likely than the general population to experience potentially high exposures to a given contaminant. Likewise, the reader should not conclude that all members of a population included in the text will necessarily experience greater exposures to a given contaminant.

This document addresses potential exposure to a single contaminant, source, or stressor. To address the areas, multiple and cumulative risks is not within the scope of this document. The guidelines on EPA's risk assessment approach are shifting towards greater consideration for multiple endpoints, sources, pathway and routes of exposure, and all the environmental media, etc. EPA's Science Policy Council has developed a document entitled, "Guidance on Cumulative Risk Assessment, Part 1. Planning and Scoping." This document is available on EPA's web site at the following address: <http://www.epa.gov/ORD/spc/cumrisk2.htm>. The document can be downloaded using Adobe Acrobat software, which is available at no cost from Adobe. The Adobe Internet address is: <http://www.adobe.com>.

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